

**WHAT IS CLAIMED IS:**

1. A method comprising:  
 positioning a substrate and a light source assembly adjacent to each other,  
 wherein the light source assembly is configured to generate light for  
 reading or writing data to an optical data storage media, wherein the  
 light source assembly comprises a first and second alignment marks,  
 wherein the substrate comprises first and second alignment marks;  
 adjusting a position of the light source assembly with respect to the substrate  
 until a line extending between the first and second alignment marks of  
 the light source assembly is substantially parallel to a line extending  
 between the first and second alignment marks of the substrate;  
 creating a rigid connection between the light source assembly and the  
 substrate.

2. The method of claim 1 further comprising providing a first adhesive  
 between the substrate and the light source assembly, wherein creating the rigid  
 connection comprises activating the first adhesive to create a fixed bond between the  
 substrate and the light source assembly.

3. The method of claim 2 wherein the first adhesive is applied to a surface of  
 the substrate.

4. The method of claim 2 wherein the first adhesive is a heat activated  
 adhesive, and wherein activating the first adhesive comprises subjecting the first  
 adhesive to heat generated by a heat source.

5. The method of claim 1 wherein the light source assembly comprises a light  
 source configured to emit a light beam for reading or writing data to the optical data  
 storage media, wherein the line between the first and second alignment marks of the  
 light source assembly is substantially parallel to a direction at which the light beam is  
 emitted from the light source.

1           6. The method of claim 1 wherein adjusting further comprises concurrently  
2 viewing one of the first and second alignment marks of the light source assembly with  
3 one of the first and second alignment marks of the substrate through a microscope.

1           7. The method of claim 1 wherein adjusting further comprises concurrently  
2 viewing one of the first and second alignment marks of the light source assembly with  
3 a centerline of the substrate through a microscope, wherein the centerline extends  
4 between the first and second alignment marks of the substrate.

1           8. The method of claim 2 wherein the substrate comprises a bond pad, wherein  
2 the first adhesive is applied to the first bond pad.

1           9. The method of claim 2 further comprising:  
2 providing a second adhesive between the substrate and an integrated circuit;  
3 adjusting a position of the integrated circuit with respect to the substrate;  
4 activating the second adhesive to create a fixed bond between the integrated  
5 circuit and the substrate.

1           10. The method of claim 9 wherein the second adhesive is applied after the  
2 first adhesive is activated.

1           11. The method of claim 9 wherein the position of the integrated circuit is  
2 adjusted with respect to the substrate before the second adhesive is activated.

1           12. A method comprising:  
2 providing a first adhesive between a substrate and a light source, wherein the  
3 light source is configured to generate light for reading or writing data  
4 to an optical data storage media, wherein the substrate comprises first  
5 and second alignment marks, wherein the light source comprises first  
6 and second alignment marks;  
7 adjusting a position of the light source with respect to the substrate until a line  
8 extending between the first and second alignment marks of the light

9 source is substantially parallel to a line extending between the first and  
10 second alignment marks of the substrate;  
11 activating the first adhesive to create a fixed bond between the substrate and  
12 the light source.

1 13. The method of claim 12 wherein the position of the light source is adjusted  
2 with respect to the substrate before the first adhesive is activated.

1 14. The method of claim 12 wherein the first adhesive is applied to the  
2 substrate.

1 15. The method of claim 12 wherein the first adhesive is a heat activated  
2 adhesive, and wherein activating the first adhesive comprises subjecting the first  
3 adhesive to heat generated by a heat source.

1 16. The method of claim 12 wherein the light source is configured to emit a  
2 light beam, wherein the line between the first and second alignment marks of the light  
3 source is substantially parallel to a direction at which the light beam is emitted from  
4 the light source.

5 17. The method of claim 12 wherein adjusting comprises concurrently viewing  
6 one of the first and second alignment marks of the light source with one of the first  
7 and second alignment marks of the substrate through a microscope.

8 18. The method of claim 12 wherein adjusting comprises concurrently viewing  
9 one of the first and second alignment marks of the light source with a centerline of the  
10 substrate through a microscope, wherein the centerline extends between the first and  
11 second alignment marks of the substrate.

1 19. The method of claim 12 further comprising:  
2 providing a second adhesive between the substrate and an integrated circuit;  
3 adjusting a position of the integrated circuit with respect to the substrate;

4 activating the second adhesive to create a fixed bond between the integrated  
5 circuit and the substrate.

1 20. The method of claim 19 wherein the second adhesive is applied after the  
2 first adhesive is activated.